United Process Valves

Tradition Innovation Commitment

DIVERTER VALVES

DD Series

DISC DIVERTER VALVES

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HISTORY & MILESTONES

2023 — June 2023, the Strahman Valves France management team acquires Strahman Valves France and Strahman MGS. Name is changed to Strahman United Process Valves.

Strahman United Process Valves
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2019 — Feb 2019, Strahman Valves France acquires MGS in Vaux Sous Aubigny. Name of this add on company becomes Strahman MGS.

Strahman MGS

2004 — Strahman Valves Inc USA, founded in 1921 acquires MG Process Valves. Name is changed to Strahman Valves France.

Strahman VALVES France

2000 — Original French founders acquire the company from Fetterolf Corp. USA Name changed to MG Process Valves.

MG PROCESS VALVES
The answer!

1998 — MG-Fetterolf moves into a new constructed building in Mery, France.

1992 — Name change to MG-Fetterolf after acquisition by Fetterolf USA.

FETTEROLF

1986 — MG Industries is founded by two French partners.

UNITED PROCESS VALVES DISC TYPE DIVERTER VALVES

Code: **DPS4**

Disc Diverter Valves

The United Process Valves disc type diverter valve is designed to divert one main flow into two separate flows. These valves are designed to minimize retention areas. They are often used as reactor isolation valves in polymer processes. Equipped with the vacuum package they are ideal for full vacuum appli-cations in combination with high temperatures. The valves are bi-directional.
Upon opening, the discs retract completely into the valve body. This provides an unrestricted full flow. In combination with our maximized port sizes this design offers maximum flow capacity.
United Process Valves disc diverter valves are available in a choice of options including materials of construction, seat arrangements and actuators. Other features include full jacketing, vacuum package and a wide array of body arrangements.

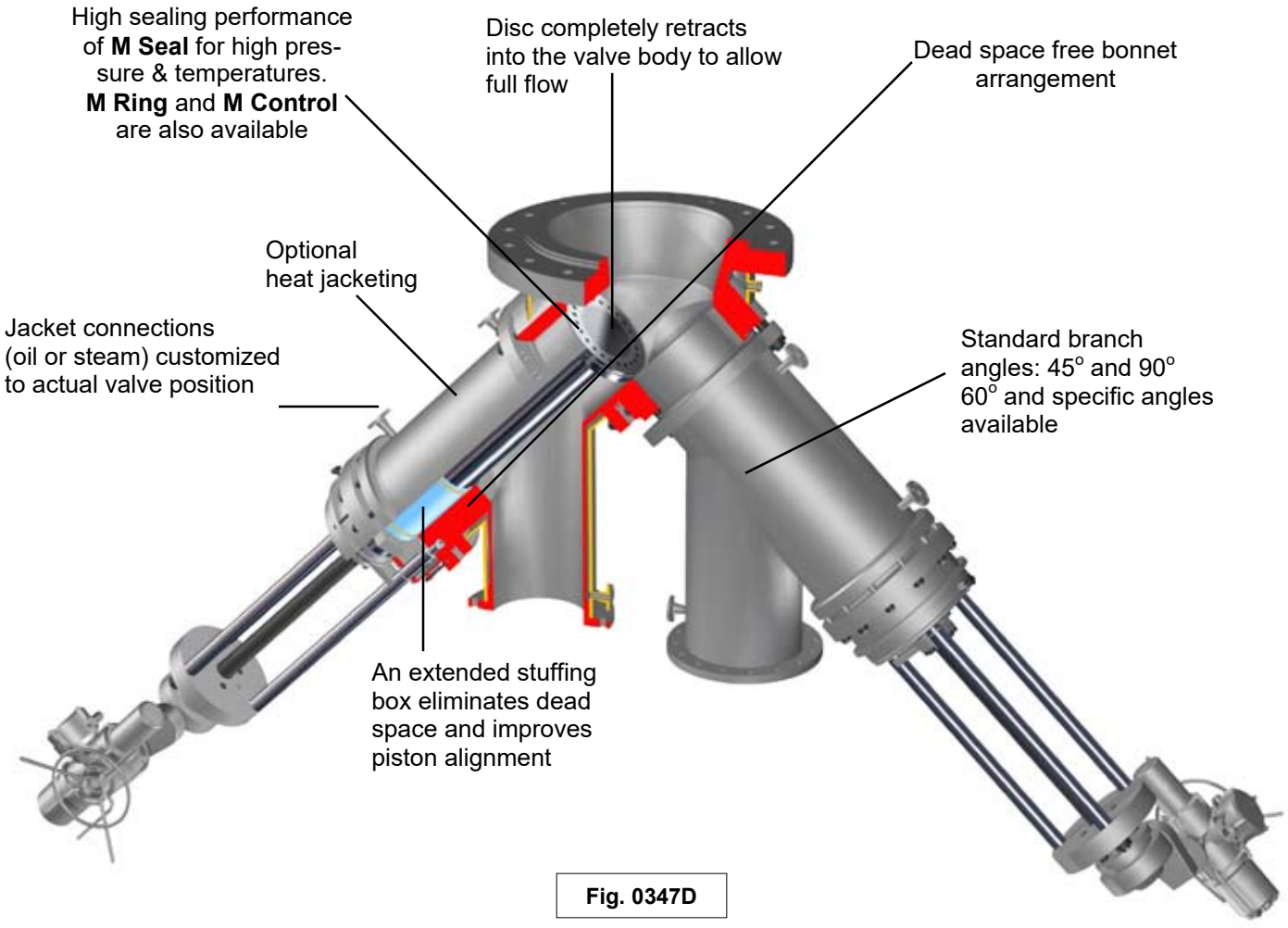
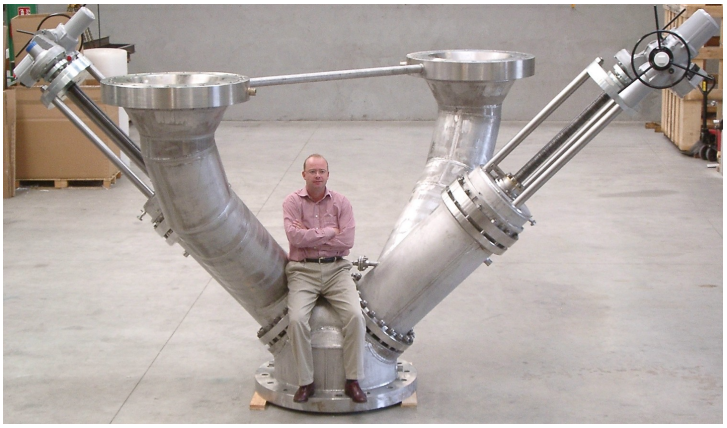


Fig. 0347D



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United Process Valves **Disc Diverter Valves** use two basic designs:

- Figure **346** is used for small sizes or high pressure applications. Valves have a rising stem design.
- Figure **347** is used for large size valves or low pressure applications. These valves use a non-rising stem design.

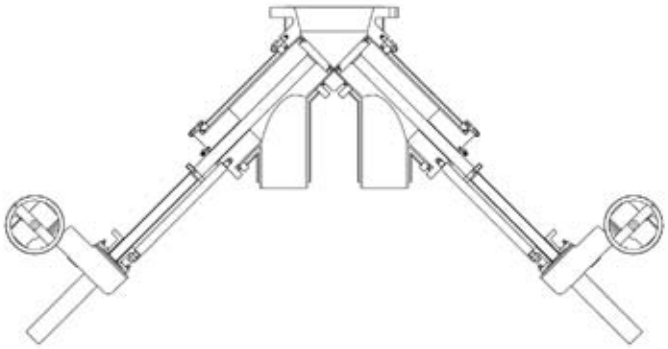

Fig. **346M**

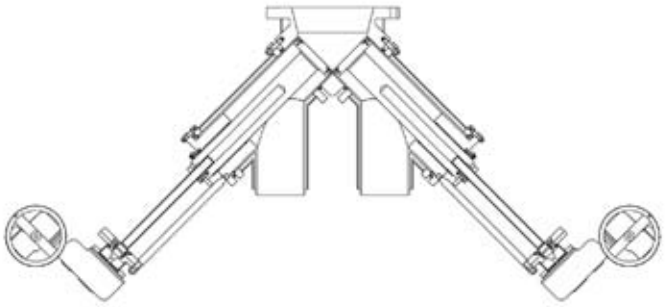

Fig. **347M**

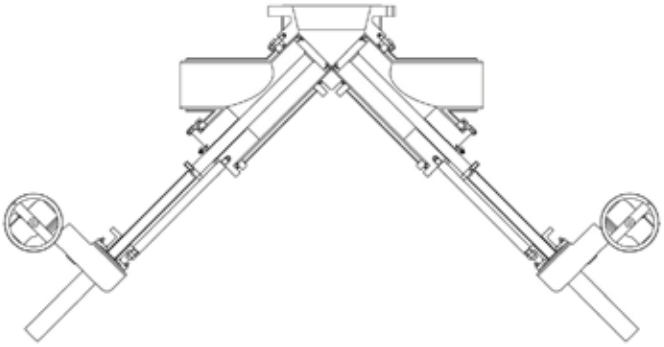

Fig. **346T**

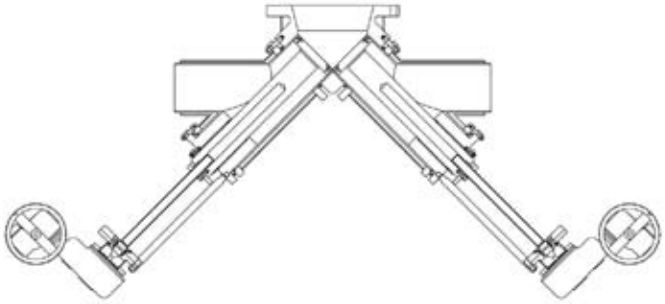

Fig. **347T**

TEMPERATURE PROBE IN THE DISC

A bottom valve is located in the middle of your process. For this reason an optional temperature probe installed in the disc will provide you with temperature information without the need of extra nozzles or reactor modifications.

Valve / Disc Assembly

Single or double PT100 temperature probe.
Explosion-proof or standard.
Temperature range:
-50° C / 400° C
-60° F / 750° F

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RANGE DEFINITION

DD Manufacturing Range	PN 10	PN 16	PN 20– 150 lbs.	PN 25	PN 40	PN 50 300 lbs.	PN64 400 lbs.	PN 100 600 lbs.	PN 150/160-900 lb	PN 250 -1500 lb	PN 320	PN 420—2500 lb	PN 630 –4500 lb
3/8"- DIN10													
1/2"- DIN15													
3/4"- DIN20													
1"- DIN25													
1 1/4"- DIN32													
1 1/2"- DIN40													
2"- DIN50													
2 1/2"- DIN65													
3"- DIN80													
4"- DIN100													
5"- DIN125													
6"- DIN150													
8"- DIN200													
10"- DIN250													
12"- DIN300													
14"- DIN350													
16"- DIN400													
18"- DIN450													
20"- DIN500													
24"- DIN600													
28' - DIN700													
32" - DN800													
36" - DN900													
40" - DN1000													
44" -DN1100													
48" - DN1200													

Fig. 346

Fig. 347

STEM LOCKING DEVICE

When safety regulations require an additional locking device to keep a valve closed, Unites Process Valves offers two different arrangements.

Arrangement A
A special half pipe blocks the stem within the top works and prevents valve from stroking

Arrangement B
Lockable handwheel

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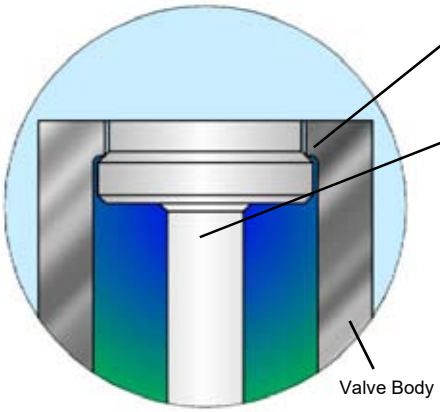
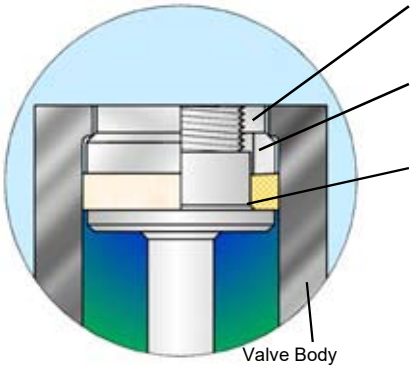
SEALING SYSTEMS

M Seal-
This sealing system offers a wide range of material combinations selected to create a differential hardness between body and plunger seat. The maintenance friendly design of the **M Seal** system provides long & reliable valve performance and is suitable for almost all process conditions.



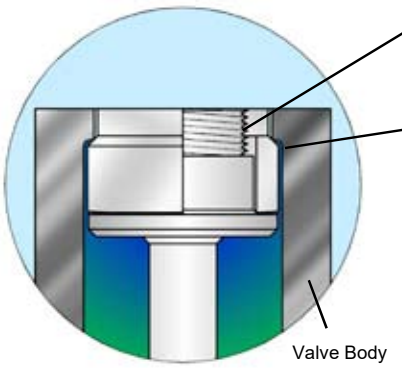
Temperature
Min: -200° C / -330° F
Max: 815° C / 1500° F
Pressure
Max: 630 bar / 9000 psig

Dual Seal- The **Dual Seal** is a unique double sealing system that works like a piston operating within a cylindrical seat. Unlike other designs, the secondary resilient seal ring is mounted on the piston and will expand after metal to metal contact of the primary seat ring. The design provides a true metal to metal seal in case of resilient seat failure.



Temperature
Min: -50° C / -60° F
Max: 200° C / 450° F
Pressure
Max: 250 bar / 3550 psig
& full vacuum

M Ring Seal- The **M Ring Seal** is also based on a differential hardness between the body and the piston surface. The replaceable metallic seal ring made of aluminum, nickel or titanium provides excellent sealing performance especially in applications that combine full vacuum and temperatures above 200° C.



Temperature
Min: -200° C / -330° F
Max: 450° C / 840° F
Pressure
Max: 250 bar / 3550 psig
& full vacuum

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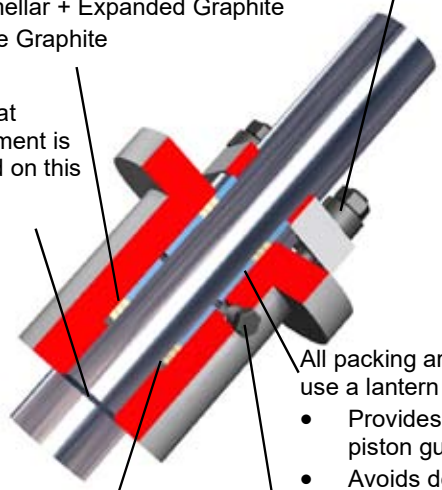
PACKING DEFINITION

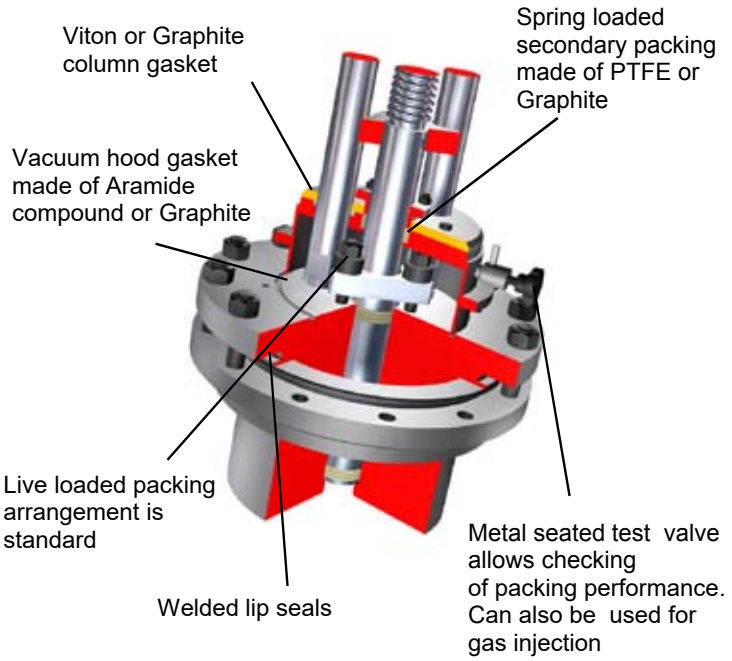
Typical Packing Materials:

- PTFE
- PTFE / Aramide Braid
- Carbon / Graphite Braid
- Graphite Braid
- PTFE / Aramide Braid + Graphite
- Lamellar + Expanded Graphite
- Pure Graphite



VACUUM HOOD

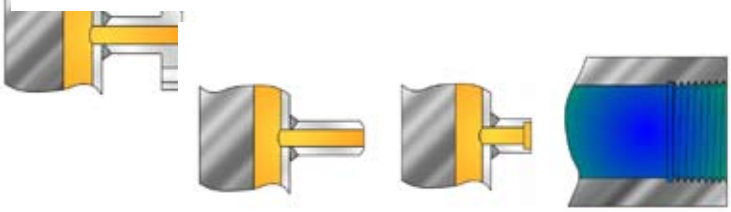
For valves on full vacuum service United Process Valves offers a special **vacuum package** that maintains tightness to atmosphere. Valves with this package are usually equipped with an **M Ring Seal** design as process sealing. The system uses a replaceable aluminium or nickel seal ring and provides high vacuum performance. This special **vacuum package** provides zero leakage between atmosphere and process.



STANDARD BODY GASKET RANGE

- PTFE
- Aramide / Nitrile
- Carbon / Aramide
- Laminated Graphite
- Laminated Graphite / 316
- Spiral Wound 316L / PTFE
- Spiral Wound 316L / Graphite
- Spiral Wound 321 / Graphite
- Spiral Wound Inconel / Graphite
- Spiral Wound Titanium / Graphite
- Welded Lips

JACKET CONNECTIONS



Flanges ANSI,DIN,JIS | Butt Weld | Socket Weld, NPI | Threaded connections NPT & BSP

Valve Coding System

D	P	S	2	R	J

D Diverter Valve

P Piston
D Disc
A Accessories

S Straight
T T Design
Y Y Design
$ Special

2 2 Valves
3 3 Valves
4 4 Valves
6 6 Valves
$ Special

M M Seal
C M Control
D Dual Seal
R M Ring Seal

J Jacketed
- Non-Jacketed

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TECHNICAL & GENERAL INFORMATION

Design Code & Construction

- Design standard compliant with ASME B16.34
- International standards include ANSI, DIN, JIS, API etc.
- Wide range of material selections including carbon steel / stainless steel / Titanium / Hastelloy / Duplex / Monel / Tantalum / Zirconium
- Fabricated, cast, forged and bar stock designs
- Combinations of fabricated, sand and investment casings, and bar stock available

Surface Finish

- For polymer applications, United Process Valves recommends a surface facing of 300 (Ra 0.4) for all parts are in contact with the medium.

Quality assurance & testing

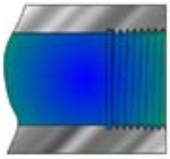
- ISO 9001 compliant
- PED / ATEX / CE marking
- ISO 15848 1 & 2, low emission testing and certification available
- Standard testing procedures

LINE & BRANCH CONNECTIONS

Flanges
ANSI, DIN, JIS

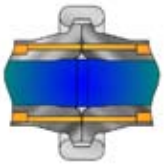
Heated
Flanges

Socket
Weld



Threaded
connections
NPT & BSP

Butt
Weld



Fast Bolting Union
Graylock Securamax

ACTUATION OPTIONS

Hand Wheel

Bevel Gear

Electric Actuator

Air Motor

Double or single
acting Air Cylinder

Double or single acting Air
Cylinder with Safety Hand Wheel

Double or single acting Air
Cylinder with side mounted
Safety Hand Wheel

Hydraulic
Cylinder

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United Process Valves products include:

PISTON TYPE SAMPLING VALVES

United Process Valves has a full line of sampling valves that produce live samples without exception. Our sampling valves unique design prevents failure caused by sediment or clogging.

PISTON TYPE DRAIN VALVES

United Process Valves Drain Valves are designed to prevent clogging. They are ideal for use in liquid and gas services or with slurries, polymers, and high viscosity fluids that tend to solidify at room temperature.

PISTON & DISC TYPE IN-LINE VALVES

United Process Valves Piston and Disc Type In-Line Valves alternative to a failing ball, plug or gate valve. With a wide range of positive sealing systems like M Seal, M Ring Seal and M Control, these valves provide superior in-line tightness. When opening the piston or disc it retracts completely into the valve body providing an unrestricted full flow.

PISTON & DISC TYPE DIVERTER VALVES

United Process Valves Diverter Valves are designed to divert process flows with high and low viscosity. They are dead space free to prevent clogging. They are ideal for use in liquid and gas services or with slurries, polymers, and high viscosity fluids that tend to solidify at room temperature.

SINGLE- & DOUBLE-DISC SLAB GATE VALVES

United Process Valves Single- & Double-Disc Slab Gate Valves are specifically designed for use in transfer line and decoking valves for ethylene cracking units and isolation applications in FCCU (fluid catalytic cracking unit) and DCU (delayed Coker unit) plants. The safety and continuous production of process plants often depend on the reliability of these “key-equipment” valves.

LINE BLINDS

United Process Valves Line Blinds provide zero leakage downstream and total isolation on process pipelines, vessels, and maritime applications. No pipeline movement is required when blind position is changed. Please contact your local United Process Valves representative for further details or visit our website:

www.unitedprocessvalves.com

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ISO 9001:2015 BUREAU VERITAS Certification

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